

What's up in Sweden

## EXPLORATION NEWSLETTER

March 2017



### EXPLORATION NEWS

**Mandalay Resources Corp** provided on January 27 exploration updates for the second half of 2016. The Rönnerberget deposit lies 4 km east-southeast of the Björkdal open pit. It was originally discovered by drilling in the late 1990's. The purposes of the 2016 drill program were to infill and extend the limited historic drilling. Results show that gold mineralization is stratabound. This is a distinctly different setting than at Björkdal. The average grade of the intercepts at Rönnerberget is much higher than in Björkdal. The Storheden area is located between 500 m and 700 m east of the existing Björkdal mining area. During 2016, three diamond drill holes were drilled to confirm the presence of both the shallow Storheden gold-bearing veins and the hypothesized deeper strike extensions of the Björkdal sheeted vein system. Two assayed intervals in one hole assayed 2.23 m true width at 9.84 g/t Au, and 0.19 m true width at 91.1 g/t Au. Both of these high-grade intervals are interpreted to represent the depth and eastward extension of the Björkdal veins in the current underground mine. The Morbacken area lies approximately 1.8 km east of the current Björkdal open pit mine and approximately one km from the eastern known limits of the Nylund deposit. Nine diamond drill holes were drilled in this area during late 2016. Preliminary investigations suggest that significant gold assay intervals are encountered within horizons similar to that at the Rönnerberget prospect.

**Talga Resources Ltd** advised on November 21 that the 2016 trial mining campaign at its Vittangi graphite project has been successfully completed. As well as providing a large supply of feed material for pilot test work, it gathered further critical data for larger scale mine planning. **Talga** reported on December 6 the first assay results from the October drilling program. At the Company's Vittangi graphite project, 13 exploration diamond drillholes for 1,210 m were completed at the Nunasvaara North deposit. The new assay results recorded high grade graphite, including zones grading over 40% graphitic carbon ("Cg"). At the Nybrännan prospect (part of Jalkunen project), two maiden exploration diamond drillholes were completed for a total of 226 m. Significant intercepts include 16.1 m @ 15.5% Cg from 96.7 m in one drillhole and 17.1 m @ 16.6% Cg from 23.6 m in a second drillhole. At the Lautakoski prospect (part of Jalkunen project), a single maiden exploration diamond drillhole was completed to test a strong EM conductor. It intercepted a zone of strongly brecciated graphite diluted by semi-massive sulphides and returned 9.2 m @ 5.4% Cg from 14.2 m downhole depth. The graphite was hosted within mineralised mafic rocks and sampling of this surrounding zone has revealed a broad zone of copper mineralization with co-incident cobalt and weak gold mineralisation. **Talga** announced on January 31 that it has commenced activities on the Company's cobalt-rich iron oxide copper-gold projects, and in particular the

Kiskama deposit. The activities include metallurgical test-work, sampling and exploration.

**Copperstone Resources AB** announced on January 26 the complete technical report regarding the modelling of the alteration zones at Svartliden. The key findings support the hypothesis that has earlier been verified. During the past three months, a detailed examination of 56 drill holes from the Svartliden area has been completed by an international team of geologists. During this period analysis of structural geological data, phyllic alteration patterns, and the identification and mapping of phreatic-magmatic breccia bodies has been carried out. Detailed 3D modelling work has formed a number of common vectors that indicate the potential for blind porphyry-style Cu-Au-Zn mineralization at depth. **Copperstone** announced on February 2, the start of a campaign of core drilling towards depth at Svartliden/Eva including three bore holes, each at approx. 800 m. The first hole aims at the expected broad and rich ore zone, beneath the assumed cap rock of the phyllic zone. The second hole is planned to be drilled from Svartliden into and beneath EVA. Localization and direction of the third hole will be decided given the experience of the initial holes.

**S2 Resources Ltd** advised on October 28 that a five month diamond drilling campaign is starting at the Skellefte project. It aims to test ten of the anomalies identified in **S2's** first VTEM survey. The initial targets have been selected on the basis of results from ground-based follow up of anomalies identified in the VTEM survey. This includes moving loop EM surveys, induced polarization surveys and base of till geochemical sampling. The previously identified Svan Vit VMS prospect will also be followed up. **S2** advised on November 23 that the first of ten targets has been tested. Drilling at one of the Svansle targets intersected a minor zone of stringer and disseminated sulphides. Numerous new anomalies have also been identified in a second VTEM survey. One of these anomalies coincides with outcropping copper-zinc sulphide mineralization at Bjurträskgruvan prospect. **S2** advised on December 19, that verification of historical drilling at the Bjurträskgruvan prospect has outlined a south dipping lens of massive sulphide, and ground EM has identified a strong south dipping conductor associated with this zone. At the Svan Vit prospect, the first follow up hole has intersected several narrow zones of stringer sphalerite mineralization.

**Barsele Minerals Corp** reported on December 14 an operational progress update for the exploration program within the Barsele Au-VMS Project area. It is being operated by joint venture partner **Agnico Eagle Mines Ltd**. Ownership in the project is 55% **Agnico Eagle** and 45% **Barsele**. During October, diamond drilling with four machines was focused within and along the trend between

the Central and Avan zones, where both extension and validation drilling has taken place. 3.00 m core length (estimated 11.50 meters true thickness) grading 7.90 g/t gold uncut (5.36 g/t gold cut) at a depth of 275 m below surface. In addition, one expansion hole returned several gold bearing zones, with the best intercept being 18.00 m core length (estimated 13.5 meters true thickness) grading 2.35 g/t gold at 370 m. On January 17, **Barsele** announced that during November, validation, conversion and expansion drilling has taken place. One highlight conversion hole yielded 6.00 m core length (estimated 4.0 m true thickness) grading 33.46 g/t gold uncut (6.33 g/t gold cut) at a depth of 180 meters below surface, plus 178.00 meters core length (estimated 125.00 meters true thickness) grading 1.68 g/t gold uncut (1.51 g/t gold cut) at a midpoint depth of 320 meters below surface. In addition, an expansion hole yielded 31.00 m core length (estimated 23.30 m true thickness) grading 2.65 g/t gold uncut (2.60 g/t gold cut) at a midpoint of 410 m below surface. This last intercept expands the known Central Zone by 175 meters towards the Avan Zone. On February 9, **Barsele** announced that during December, four machines continued diamond drilling, with two validation and four conversion holes. One highlight conversion hole yielded 26.00 m core length (estimated 19.50 m true thickness) grading 4.00 g/t gold uncut (1.65 g/t gold cut) at a midpoint depth of 120 m below surface, plus 46.00 m core length (estimated 35.00 m true thickness) grading 1.96 g/t gold at a midpoint depth of 205 m below surface. In addition, one validation hole cut 2.50 meters core length (estimated 2.00 m true thickness) containing polymetallic quartz veins grading 2.87 g/t gold, 286.00 g/t silver, 2.67% lead, 0.62% zinc. During December, 3,045 meters were drilled, for a cumulative total of 39,111 meters in 85 holes, since October 2015. Basal till sampling results have been received. The analytical results indicate that the gold mineralization most likely continues between the Central and Avan zones and there is a possibility for additional parallel gold zones to the southwest of Avan and Skiråsen.

**Leading Edge Materials Corp** announced on January 11 the submittal of application documents to Swedish authorities to undertake drilling at the Company's Bergby lithium project. Bergby lies in central Sweden, 25 km north of the town of Gävle. The proposed drilling will be the first program ever undertaken at the Bergby site. Permission has been requested to drill up to 40 diamond holes, comprised of a combination of short holes to prospect beneath glacial soil cover and deeper holes to test the extent of the lithium mineralized pegmatite. **Leading Edge Materials** has discovered both a boulder field and located outcrops with lithium mineralization. 15 samples taken from 3 outcrop areas returned  $\text{Li}_2\text{O}$  averaging 1.71% and  $\text{Ta}_2\text{O}_5$  averaging 133 ppm.

**Botnia Exploration AB** announced on December 8 that Luleå University is commissioned to further develop the enrichment process for the Fäbodtjärn gold deposit. The purposes are to increase the yield of gold, and to seek ways to deposit the waste in an environmentally acceptable manner. The results show that Fäbodtjärn may be enriched either by a combination of gravimetric and flotation or through leaching. Both options provide good yields.

In a December quarterly report, **Aura energy** announced the preparation for a diamond drilling program to commence in February 2017 at its Häggån uranium project. A program of 750 m in 3 holes is programmed for the first Quarter 2017 for geostatistical and resource upgrade purposes.

## MINING NEWS

On December 20, **Boliden** announced the decision to drive a new drift down to a previously reported zinc and copper deposit in Rävliiden at the Kristineberg mine in the Boliden Area. The deposit is judged to be an important part of the continued development of the Boliden Area. The decision on a new drift is being taken in light of the new mineral resource Rävliiden that was reported in February 2016. The drift, which will be driven during 2017 and 2018, will be 3 km long and will run from the Kristineberg mine to Rävliiden at a depth of 1000 m.

On February 15, **LKAB** reported that the fourth quarter indicates stable production and delivery volumes, but profits were weighed down by the costs of urban transformation provisions and impairment losses for the Mertainen open-pit mine. For the full year 2016, LKAB is reporting increased production and delivery volumes, record levels of pellet production and reduced costs. Despite this, non-recurring items meant that the result for the year was a loss.

**Mandalay Resources Corp** announced on December 15 substantially increased Mineral Resources and Mineral Reserves at its Björkdal open pit and underground gold mine. In the Measured and Indicated Resource categories after mining depletion, contained gold increased from 598,000 ounces as of December 31, 2015, to 911,000 ounces as of September 30, 2016. In the Proven and Probable Reserve categories, contained gold increased from 418,000 to 586,000 ounces in the same period. These increases are after depletion of 44,000 ounces produced from December 31, 2015 to September 30, 2016.

**SGU**

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